

A Field Guide to Common Aquatic and Riparian Plants of New Hampshire



NORTHERN ARROW-WOOD Viburnum recognitum

👺 Status: Native

Habitat: Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.

Height: Up to 15 feet tall, forming thickets.

Bark: Smooth and gray with a white pith.

Twigs: Brownish-gray, hairless, highly branched, long, straight, slender, arrow-like, smooth.

Buds: Reddish-brown with 2 pairs of scales. Opposite, pointed, approximately ¼ inch long, rounded scales with fringe of minute hairs along the borders.

Leaves: Opposite, egg-shaped to round, with saw-like coarse teeth, 1-2 inches long and 3 inches wide, tapering to a point, with very prominent smooth veins.

Flower: Numerous, small, white-petaled flowers on short stalks in a somewhat dense terminal flat cluster.

Flowering Period: June through July.

Fruit: Fleshy, blue-black, berry-like, approximately 1/3 inch wide, containing a flattened seed, appearing in August.



BUTTONBUSH Cephalanthus occidentalis



- **Status:** Native
- **Habitat:** Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.
- Meight: Up to 12 feet tall; typically 3-5 feet tall.
- **Bark:** Smooth and grayish when young, flaky and grayish when older. Light-brown pith.
- **Twigs:** Slender, round or angled, grayish-brown to purplish marked with light, elongated lenticels.
- **Buds:** Small in depressed areas, surrounded by bark.
- Leaves: Opposite or in whorls of 3-4. Shiny, dark-green above, lighter green and slightly downy beneath. Leathery, smooth, oblong to oval, 3-6 inches long, broad at the base, pointed at tips often with short red stalks.
- Flower: Densely clustered, spherical, creamy white ball-shaped flowers, long-stalked, often in groups of 3, 1-1 ½ inch wide. Ripe heads brownish, fragrant.
- **Flowering Period:** July through August.
- **Fruit:** Small, triangular-shaped capsules, greenish in ball-like heads like the flowers. Persist into winter.
- **Value:** Butterfly and moth species are often found feeding on the sweet nectar of the tubular flowers because of their long, curled mouthparts. Caterpillar pupas are often found on buttonbush because of the food association with larvae and adults. (Smagula and Connor, 2007)



Elderberry showing fruit

ELDERBERRY/BLACK-BERRIED ELDER Sambucus canadensis

- **Status:** Native
- **Habitat:** Shrub and forested wetlands, edges of streams and rivers.
- **Height:** Up to 12 feet tall, often forming thickets.
- **Bark:** Green.
- **Twigs:** Pale yellow-brown to light-brown with numerous large, raised lenticels. Ill-smelling when bruised. Fluted or squared pith very thick, white, and soft.
- **Buds:** Small, round to oval, covered with brownish scales.
- Leaves: Opposite, pinnately compound, with 5 to 11 leaflets, usually 7. Lanceolate to ovate, abruptly narrowing at the tip. Sharply-toothed. Lower leaflets often 3-parted. Smooth above, smooth or downy on veins beneath.
- **Flower:** Small, white, nicely-scented flowers with 5 white petals in a flat-topped cluster up to 6 inches wide, generally with 5 main branches.
- **Solution** Flowering Period: Late June through July.
- **Fruit:** Juicy, purplish-black berries in flat-topped clusters containing many seeds, appearing late August to early October.
- **Value:** Produces fruit that makes tasty jelly and wine. It is also an important food source for many songbirds.



Elderberry showing flowers

GLOSSY BUCKTHORN Rhamnus frangula



Habitat: Generalist. Full-sun or shade, moist, dry, acidic, or basic soils. Woodland borders, forested wetlands, floodplain forests.

Height: Up to 20 feet tall.

Twigs: Grayish with whitish lenticels.

Buds: Naked, downy, up to ¼ inch long.

Leaves: Alternate, whorled, oblong, 4-5 inches long and 3-4 inches wide. Long growing season, leafing out in May and holding its leaves into November.

Flower: Small, greenish-white, in small clusters in the leaf axis.

Flowering Period: May through September. Flowers and fruits continuously from May through September. Plants often display buds, flowers, immature fruit, and mature fruit simultaneously.

Fruit: Berry with 2-3 pits, approximately ¼ inch wide, turning from green to red and eventually blue-black. Often all three colored berries are on the plant at the same time. Sometimes difficult to recognize in a forested situation, due to its non-descript appearance, but easily recognized July through September due to masses of berries.





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HIGHBUSH BLUEBERRY Vaccinium corymbosum



- Status: Native.
- **Habitat:** Shrub and forested wetlands, rich woods, edges of lakes, ponds, streams and rivers.
- **Height:** Up to 15 feet tall, often forming thickets.
- **Bark:** Rough, brown. Stem and larger branches shreddy.
- **Twigs:** On some bushes reddish-brown, on other bushes they are yellow. Covered with small warty lenticels, zigzagged or angled.
- **Buds:** Flower buds red, plump, pointed, with spine-like pointed scales. Leaf buds smaller, two outer scales with hair-like point.
- Leaves: Alternate, pointed on both ends, green on both sides, untoothed. Lower side slightly wooly on the veins. Up to 3 inches long and 1 ½ inch wide. Deep red in autumn.
- **Flower:** Cylindrical, white or pink, up to ½ inch long and ¼ inch wide in dense terminal or lateral clusters.
- **Flowering Period:** April through June appearing when leaves are only half grown.
- **Fruit:** Blue-black berry, up to ½ inch wide with whitish bloom, sweet, in clusters.
- **Value:** Berries eaten by numerous birds and wildlife.
- Similar Species: Maleberry (Lyonia ligustrina). Highbush blueberry can be distinguished by its terminal clusters of fruit and by berries rather than capsules for fruit.



HOBBLEBUSH Viburnum alnifolium



- Status: Native.
- **Habitat:** Cool, moist ravines, edges of rivers and streams.
- **Height:** Up to 10 feet tall.
- **Bark:** Light brown with wavy grooves.
- **Twigs:** Tough, stout, olive-brown to light purplish-brown. Coated with rusty brown hairs toward the tip.
- **Buds:** Large, long, in pairs, light-brown covered with velvety fuzz. Flower buds rounded and occur only at tips of twigs.
- **Leaves:** Very large, 4-8 inches long. Almost round, finely toothed, heart-shape at base. Hairy beneath, rusty, veins much branched. Brownish hairs on stalks.
- **Flower:** Large white clusters with 5 petals, appearing before leaves are fully grown.
- Flowering Period: May through June.
- **Fruit:** Red berries turning black. Stones with a groove on each edge.
- **Similar Species:** Likely to be confused with dogwoods. Viburnum leaves are nearly always toothed, or lobed, while dogwood leaves are smooth, untoothed, and veins are parallel.







HONEYSUCKLE Lonicera spp. (L. morrowii, L. tatarica, L. maackii)

- Status: Non-Native/Exotic, Invasive. These species are prohibited in New Hampshire.
- **Habitat:** Fields, roadsides, fence-rows, hedge-rows, edges of woods.
- Weight: 10 to 15 feet tall.
- **Bark:** Tan to brown, shredded in appearance.
- **Twigs:** Generally glabrous, thornless.
- **Buds:** Blunt to acute.
- Leaves: Opposite, entire, oblong to egg-shaped, 1-5 inches long.
- **Flower:** 5-lobed, tubular, sometimes fragrant, growing in leaf axils, white to yellow.
- **Fruit:** Red, rarely yellow, juicy, few-seeded berry. July through September.
- **Solution** Flowering Period: May through June.

Morrow's Honeysuckle Lonicera morrowii

Leaves and young twigs densely downy. Leafy bracts beneath flowers not glandular. Leaves broadest below the middle. Flowers white fading to yellow.

Tartarian Honeysuckle Lonicera tartarica

Undersides of leaves and young twigs are hairless. Flowers usually pink-red. Only species that has hollow pith.

Amur Honeysuckle Lonicera maackii

Upper surface of leaves are shiny. Bark is gray or tan and exfoliates somewhat in vertical strips. Flowers white fading to yellow.



JAPANESE KNOTWEED Polygonum cuspidatum



- Status: Non-Native/Exotic, Invasive. This species is prohibited in New Hampshire.
- **Habitat:** Woodlands, open spaces, ditches, roadside ditches, edges of streams and rivers.
- **Height:** Up to 10 feet tall. Fast growing, aggressive, easily spreads and reproduces vegetatively.
- **Twigs:** Greenish, hollow, jointed, bamboo-like. Stems often persist into winter.
- **Leaves:** Alternate, large, untoothed, broadly ovate, 3-7 inches long with pointed tips and square bases.
- **Flower:** Many small, whitish flowers growing in slender, finger-like clusters in the leaf axils.
- **Flowering Period:** August to September.
- Fruit: White, papery, wind-dispersed, x-shaped in cross-section.





MALEBERRY Lyonia ligustrina

Status: Native

Habitat: Shrub and forested wetlands, rich woods, gentle slopes, edges of streams and rivers.

Height: Up to 10 feet tall, often forming thickets.

Bark: Light gray, shreddy, shaggy. Younger bark appearing slightly hairy, older bark gray with white lenticels.

Twigs: Yellow-brown to ash-gray mottled with black. Flowering twigs leafless.

Buds: No terminal bud. Lateral buds flattened, red, oval, pointed with a single reddish scale.

Leaves: Alternate, elliptic to oblong, stalked, up to 3 inches long, pointed at both ends, minutely toothed. Rough above, slightly-hairy beneath.

Flower: Small, round, white flowers in clusters up to 6 inches long.

Flowering Period: May through July.

Fruit: Greenish-gray to brown, small, round capsules with 5 partitions. No larger than flower. Crowded in groups on the stem, persisting through winter. Dry, brown pods resembling blueberries.

Similar Species: Highbush blueberry (*Vaccinium corymbosum*). Maleberry can be distinguished by its flattened red buds, lateral rather than terminal clusters, and by capsules of fruit instead of berries.







MEADOWSWEET Spiraea latifolia

Status: Native

Habitat: Marshes, wet meadows, edges of lakes, ponds, streams, and rivers.

Weight: 2-3 feet tall, forming large, dense colonies.

Bark: Thin, peeling in filmy layers.

Twigs: Smooth, slender, light reddish-brown to purple; more or less angled. Unbranched (except occasionally toward the top where branching may occur).

Buds: Many, small, smooth, oval, with several scales.

Leaves: Alternate, oblong, narrow, toothed, short-stalked, tapering to the base with pointed to round tips. Up to 3 inches long and 1 ½ inches wide.

Flower: Pyramid clusters of white to pinkish, 5-parted small flowers occurring at tip of stem.

B Flowering Period: July into September.

Fruit: Small, hard, smooth cluster of 5-6 tiny pods, persisting over winter in the inflorescence, giving it a dark-brown color.



MULTIFLORA ROSE Rosa multiflora



- Status: Non-Native/Exotic, Invasive. This species is prohibited in New Hampshire.
- **Habitat:** Generalist. Variety of soil, moisture and light conditions.
- **Height:** Up to 9 feet tall. Shrubby, arching.
- **Bark:** Green. Older stems turn woody.
- **Twigs:** Long, arching, with stiff re-curved thorns, tips root to form new plants.
- Leaves: Alternate, pinnately compound, 7-9 toothed leaflets, each leaflet about 1 inch long. Fringed stipule at the base of leaf stem.
- Flower: Dense clusters of fragrant, white or occasionally pink 5-petaled flowers up to 1 ½ inch wide. Persist into winter.
- **Flowering Period:** May through June.
- Fruit: Small, round, hard, red berry called a "hip". Smallest hip of any rose in New England; persists into winter.
- Similar Species: Multiflora rose can be distinguished from other roses by the presence of a fringed stipule on the leaf petiole.





NORTHERN WILD RAISIN/ WITHEROD VIBURNUM Viburnum cassinoides



- **Status:** Native
- **Habitat:** Shrub and forested wetlands, valleys, gentle slopes, edges of streams and rivers.
- **Height:** Up to 10 feet tall, usually up to 7.
- **Bark:** Smooth, grayish-brown.
- **Twigs:** Slender, long, flexible, dull, pale grayish to light-brown. Slightly hairy. Somewhat angled, with indistinct lenticels.
- **Buds:** Covered by a single pair of scales. Terminal buds long, yellow, or golden. 2 light-brown scales split curved. Flower buds large and flask-shaped.
- Leaves: Opposite, lanceolate to oval, loosely toothed, up to 4 inches long on short stalks, tapering to an abrupt point. Dark green above, dull green below, leathery.
- **Flower:** Many small white, 5-lobed flowers, in short-stalked, flat-topped clusters at the tips of the twigs.
- **§ Flowering Period:** May through July.
- Fruit: Fleshy, blue-black berry-like, approximately ¼ inch wide, containing a flat seed. Dull red as maturing.



SHADBUSH/SERVICEBERRY Amelchier canadensis



- **Status:** Native
- **Habitat:** Forested wetlands, floodplains, rich woods, edges of streams and rivers.
- **Meight:** Up to 25 feet tall, usually growing in thickets.
- **Bark:** Gray, smooth, thin, vertical fissures, separating smooth flat areas in older trees.
- **Twigs:** Rancid taste and smell (slight taste of bitter almonds). Slender, grayish, often covered by a gray skin, smooth. Lenticels are scattered minute dots.
- **Buds:** Terminal buds long, narrow, greenish-yellow or purple.
- **Leaves:** Alternate, oblong, finely-toothed, broadest above the middle. Veins curved. When half grown with white felt or wooly hairs beneath. Up to ¾ inch long, rounded at the tip and base.
- **Flower:** Many medium-sized, 5-petalled, white flowers, approximately ³/₄ inch wide, on stalks in clusters appearing when leaves are half grown.
- **The Flowering Period:** April through June.
- **Service:** Mark-purple to black berries.



SHEEP LAUREL/LAMBKILL Kalmia angustifolia



Habitat: Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.

Weight: Up to 3 feet tall, usually forming thickets.

Bark: Reddish brown.

Twigs: Pale brown, smooth.

Buds: Naked, no scales, or only 2 showing.

Leaves: Evergreen. Occasionally opposite but usually in whorls of 3. Elliptic to oblong, on very short stems, crowded on the branch opposite in threes. Bright green above, pale or whitened beneath. Both surfaces smooth.

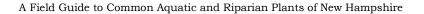
Flower: Small, deep pink to reddish-purple, 5-lobed, approximately 1 ½ inch wide, in clusters among the leaves.

B Flowering Period: May through July.

Fruit: Small, brownish, round capsule with 5 partitions in clusters that persist over winter.







SILKY DOGWOOD Cornus amomum



Status: Native

Habitat: Shrub and forested wetlands, edges of streams and rivers.

Meight: Up to 10 feet tall, forming dense thickets.

Twigs: Much branching, lower portion of the stem light brown, upper portions becoming streaked with red. One-and two-year old branches completely red and velvety. Twigs moderate to slender, with spongy chocolate-brown piths.

Buds: Smooth, hairy.

Leaves: Opposite, ovate to elliptic, rounded at base, with pointed tips. Veins branching off midvein that follow up the smooth leaf without reaching edge. Up to 5 inches long and half as wide, rounded to somewhat wedgeshaped at the base and abruptly pointed at the tip, pubescent beneath, on short to moderate stalks, turning red in autumn.

Flower: Many small, white, 4-petalled flowers, in broad, flat-topped clusters up to 3 inches wide at the tips of branches.

§ Flowering Period: May through July.

Fruit: Blue or blueish-white berries.

Similar Species: Red Osier Dogwood (Cornus stolonifera)





SPECKLED ALDER Alnus rugosa



Status: Native

Habitat: Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.

Height: Up to 25 feet tall, often branching from the base.

Bark: Brown, with whitish horizontal lenticels.

Twigs: Olive-brown to reddish brown, smooth, downy with greenish triangular pith.

Buds: Stalked, reddish, covered by 2-3 scales equal in length, coated with grayish or brownish down, no terminal bud.

Leaves: Alternate, oval or rounded, broadest below the middle, 2-4 inches long. Doubly toothed or wavy. Green above, pale beneath. Leaf base rounded or heart-shaped. Up to 6 inches long and 3 inches wide.

Flower: Develop long before the leaves. Male catkins long, finger-like, drooping. Female catkins upright in clusters, stalked, resembling a small pine cone, arching, appearing below male.

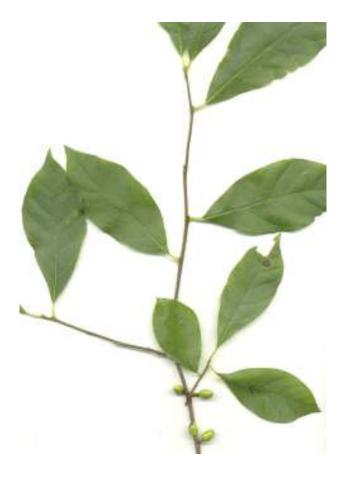
Flowering Period: April through June, before leaves emerge.

Fruit: Female catkins ripening into ½ inch cylindrical cones, persistent in winter.

Comments: Distinguishing features are the conspicuous white lenticels on the trunk and on the twigs, the short, thick stalks of the "cones", and the conspicuous net venation of the leaves. In winter, the immature female spikes droop.



SPICEBUSH Lindera benzoin



- **Status:** Native
- **Habitat:** Forested wetlands, floodplains, rich woods, edges of streams and rivers.
- 🐞 **Height:** Up to 10 feet tall.
- **Bark:** Smooth, grayish-brown.
- **Twigs:** Younger growth is green with white lines and specks while older portions with smooth, gray-brown bark.
- **Buds:** Leaf buds small, pointed. Flower buds larger, stalked. Spherical, arranged on one side of a leaf bud above the scar.
- Leaves: Alternate, obovate to ovate, somewhat pointed, up to 4 inches long and 2 inches wide.
- **Flower:** Small, yellow. Male and female occur in clusters on separate plants.
- *** Flowering Period:** April through May.
- **Fruit:** Fleshy, red and berry-like, up to ½ inch long, containing one large seed.



STEEPLEBUSH Spiraea tomentosa



Status: Native

Habitat: Wet meadows, marshes, shrub wetlands, edges of lakes, ponds, streams, and rivers.

Height: Up to 3 ½ feet tall.

Bark: Thin, hairy, peeling, shredding into strips.

Buds: Lateral buds covered with wool. No terminal bud.

Leaves: Alternate, simple, toothed, up to 2 inches long, white or woolly beneath with brownish, rusty, or tawny hairs.

Flower: Small, 5-petaled deep pink or rose colored flowers in dense, steeple-like terminal spike up to 6 inches long.

Flowering Period: July into September.

Fruit: One-celled capsules, persistent into winter.

Similar Species: The pinker plants are often confused with purple loosestrife. Steeplebush has alternate leaves whereas purple loosestrife has opposite or whorled leaves. The stems of Steeplebush tend to be round in cross-section, whereas the stems of purple loosestrife are square in cross section. (Smagula and Connor, 2007)



SWEET PEPPERBUSH Clethera alnifolia

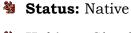


- **Status:** Native
- **Habitat:** Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.
- **Height:** Up to 10 feet tall.
- **Bark:** Dark grayish or blackish. Branches of previous year shreddy or flaky.
- **Twigs:** Slender, round and slightly downy on new twigs with large white pith.
- **Buds:** Lateral buds small and obscure. Terminal buds are downy, large, and pointed.
- **3 Leaves:** Alternate, egg-shaped to oblong, small, broadest above middle, sharply-toothed except at base. Straight-veined; both sides smooth and green, abruptly blunt-pointed. Up to 4 ½ inches long and 1 ½ inches wide.
- **Flower:** Many small, 5-petaled, fragrant, white flowers occurring on terminal spike.
- **Flowering Period:** July through September.
- **Fruit:** Small, tan, round capsule, each with 3 hairy partitions, resembling peppercorns, persisting into winter.









Habitat: Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.

Height: Up to 10 feet tall.

Bark: Gray, smooth.

Twigs: Slender, dark purple-gray with many small lenticels.

Buds: Tiny, blunt at tip, diverging from the twig. Crowded, upper buds larger. Terminal bud present.

Leaves: Alternate, ovate, thick, dull-green above, downy beneath, coarse-toothed, prominent veins, Broadest at or above the middle, pointed at both ends.

Flower: Very small, greenish or yellowish white. Male and female flower son separate plants, 6-8 petals, in clusters seated directly on stem, ¼ inch in diameter of very short stalks.

Solution Flowering Period: May through August.

Fruit: Bright red, berry-like with 3-5 bony nuts borne singly or in clusters, approximately ¼ inch wide containing several seeds, persisting into winter.

Value: Extremely showy in late fall and early winter when covered with their bright red fruit, these shrubs are either male or female. Attractive to birds.



WITCH HAZEL Hamamelis virginiana



Status: Native

Habitat: Shrub and forested wetlands, edges of lakes, ponds, streams, and rivers.

Meight: Up to 30 feet tall.

Bark: Mottled, light-brown to gray, smooth to scaly.

Twigs: Zigzag, smooth to slightly hairy. Short shoots light orange brown, with rusty or gray hairs. Some brown warts, but lenticels indistinct.

Buds: Lateral buds flattened, with rusty brown hairs. Terminal bud stalked, curved, or sickle-shaped.

Leaves: Rounded to oval, wavy, lopsided, toothed in shallow rounded lobes. Main veins prominent, 5-7 nerves. One-sided at base.

Flower: Bright yellow, crinkled, curving petals, persisting into winter, remaining attached to twig.

Flowering Period: August into November.

Fruit: Woody, hairy, light-brown, 2-seeded pod, with 4 well-spaced curved points, splitting open and ejecting black seeds forcibly, ripening a year after flowers. Open pods remain on stem.

